

## CLAIMS

What is claimed is:

1. A method in a computing system for preemptive determination of the potential for atypical clinical event occurrence related to the administering of at least one medication to a person having an electronic medical record, comprising the steps of:
  - accessing a list of possible medications that may be administered prior to or during a medical procedure;
  - comparing the medication list to information in a person's medical record; and
  - determining whether at least one match exists between any of the medications included in the list and the record information, the match relating to the potential of an atypical clinical event occurring if the associated medication were to be administered to the person, and if there is a match, outputting a response relating to each match.
2. The method of claim 1, wherein the step of accessing a list of possible medications comprises accessing a list of possible medications that may be administered to a specific person scheduled to undergo a specific type of medical procedure, and wherein the step of comparing the medication list comprises comparing the medication list to information in the specific person's medical record.

3. The method of claim 1, wherein accessing a list of possible medications comprises accessing a list of possible medications that may be administered to any person scheduled to undergo a specific type of medical procedure, and further comprising the steps of selecting a person to undergo the medical procedure and receiving at least one of the medications from the list of medications.
4. The method of claim 1, wherein the atypical clinical event is one selected from the group consisting of a drug-drug interaction, drug-food interaction, a drug-allergy interaction, and a drug-gene interaction.
5. The method of claim 1, wherein the medical procedure includes any medical procedure requiring the use of anesthesia.
6. The method of claim 1, wherein the list of possible medications includes medications used in a medical procedure involving anesthesia.
7. The method of claim 1, wherein the list of possible medications includes medications used in a radiologic medical procedure.
8. The method of claim 1, wherein the list of possible medications includes medications used in an oncologic medical procedure.
9. The method of claim 1, wherein the information in the person's medical record includes a list selected from one of the groups consisting of medications the person is currently taking or has recently taken, foods the person has consumed, the person's allergies to medications and genetic test information for the person.

10. The method of claim 1, wherein the response includes a listing of the match and the associated atypical clinical event, and wherein the atypical clinical event is one selected from the group consisting of a drug-drug interaction, drug-food interaction, drug-allergy interaction and a drug-gene interaction.
11. The method of claim 10, wherein the list of possible medications includes a dosage amount for each medication in the list, and wherein the response further includes an indication of the predicted severity of the atypical clinical event.
12. The method of claim 10, further comprising displaying information about at least one medication of the list of possible medications that is involved in the match upon selection of the medication at the response.
13. The method of claim 1, wherein the list of possible medications is received over a communication network from a remote computing device.
14. The method of claim 1, further comprising:
  - selecting the person from a list of person's scheduled for a medical procedure;
  - and
  - accessing the person's medical record prior to comparing the medication list to information in the person's medical record.

15. The method of claim 1, wherein the step of determining whether at least one match exists includes querying a data structure containing information selected from one of the groups consisting of drug-drug interactions and drug-food interactions, and determining if each at least one match correlates with one of the drug-drug interactions and drug-food interactions.
16. The method of claim 1, further comprising retrieving a specific person's medical record prior to comparing the medication list to information in the person's medical record.
17. A method in a computing system for preemptive determination of the potential for atypical clinical event occurrence related to the administering of at least one medication to a person having an electronic medical record, comprising the steps of:
  - accessing a pre-defined list of possible medications that may be administered prior to or during a medical procedure;
  - comparing the medication list to information in a person's medical record; and
  - determining whether at least one match exists between any of the medications included in the list and the record information, the match relating to the potential of an atypical clinical event occurring if the associated medication were to be administered to the person, and if there is a match, outputting a response relating to each match.
18. The method of claim 17, wherein the atypical clinical event is one selected from the group consisting of a drug-drug interaction, drug-food interaction, a drug-allergy interaction, and a drug-gene interaction.

19. The method of claim 17, wherein the medical procedure includes any medical procedure requiring the use of anesthesia.
20. The method of claim 17, wherein the list of possible medications includes medications used in a medical procedure involving anesthesia.
21. The method of claim 17, wherein the information in the person's medical record includes a list selected from one of the groups consisting of medications the person is currently taking or has recently taken, foods the person has consumed, the person's allergies to medications and genetic test information for the person.
22. The method of claim 17, wherein the response includes a listing of the match and the associated atypical clinical event, and wherein the atypical clinical event is one selected from the group consisting of a drug-drug interaction, drug-food interaction, drug-allergy interaction and a drug-gene interaction.
23. The method of claim 22, wherein the list of possible medications includes a dosage amount for each medication in the list, and wherein the response further includes an indication of the predicted severity of the atypical clinical event.
24. The method of claim 22, further comprising displaying information about at least one medication of the list of possible medications that is involved in the match upon selection of the medication at the response.

25. The method of claim 17, further comprising:
- selecting the person from a list of person's scheduled for a medical procedure;
  - and
  - accessing the person's medical record prior to comparing the medication list to information in the person's medical record.
26. The method of claim 17, wherein the step of determining whether at least one match exists includes querying a data structure containing information selected from one of the groups consisting of drug-drug interactions and drug-food interactions, and determining if each at least one match correlates with one of the drug-drug interactions and drug-food interactions.
27. The method of claim 17, further comprising retrieving a specific person's medical record prior to comparing the medication list to information in the person's medical record.
28. The method of claim 17, further comprising modifying the medication list by adding or deleting medications from the list prior to comparing the medication list to information in the person's medical record.

29. A method in a computing system for preemptive determination of the potential for atypical clinical event occurrence related to the administering of at least one medication to a person having an electronic medical record, comprising the steps of:
- accessing a pre-defined list of possible medications that may be administered;
  - comparing the medication list to information in a person's medical record; and
  - determining whether at least one match exists between any of the medications included in the list and the record information, the match relating to the potential of an atypical clinical event occurring if the associated medication were to be administered to the person, and if there is a match, outputting a response relating to each match.
30. The method of claim 29, wherein the at least one medication is to be administered to the person prior to or during a medical procedure, and wherein the medication list includes a universal set of medications that may be administered regardless of the type of medical procedure.
31. The method of claim 29, wherein the atypical clinical event is one selected from the group consisting of a drug-drug interaction, drug-food interaction, a drug-allergy interaction, and a drug-gene interaction.
32. The method of claim 29, wherein the at least one medication is to be administered to the person prior to or during a medical procedure, and wherein the medical procedure includes any medical procedure requiring the use of anesthesia.

33. The method of claim 29, wherein the information in the person's medical record includes a list selected from one of the groups consisting of medications the person is currently taking or has recently taken, foods the person has consumed, the person's allergies to medications and genetic test information for the person.
34. The method of claim 29, wherein the response includes a listing of the match and the associated atypical clinical event, and wherein the atypical clinical event is one selected from the group consisting of a drug-drug interaction, drug-food interaction, drug-allergy interaction and a drug-gene interaction.
35. A computing system for preemptively determining the potential for atypical clinical event occurrence related to the administering of a medication to a person having an electronic medical record, comprising:
- a receiving component that receives a list of possible medications that may be administered prior to or during a medical procedure;
  - a comparing component for comparing the medication list to information in a person's medical record;
  - a determining component that determines whether a match exists between any of the medications included in the list and the medical record information, the match relating to the potential of an atypical clinical event occurring if the associated medication were to be administered to the person; and
  - an outputting component that outputs a response relating to each match.



36. The system of claim 35, wherein the receiving component receives a list of possible medications that may be administered to a specific person scheduled to undergo a specific type of medical procedure, and wherein the comparing component compares the medication list to information in the specific person's medical record.
37. The system of claim 35, wherein the receiving component receives a list of possible medications that may be administered to any person scheduled to undergo a specific type of medical procedure, and further comprising a selecting component for selecting a person to undergo the medical procedure and receive at least one of the medications from the list of medications.
38. The computing system of claim 35, wherein the atypical clinical event is one selected from the group consisting of a drug-drug interaction, drug-food interaction, drug-allergy interaction and a drug-gene interaction.
39. The computing system of claim 35, wherein the list of possible medications received includes medications used in a medical procedure involving anesthesia.
40. The computing system of claim 35, wherein the list of possible medications received includes medications used in a radiologic medical procedure.
41. The computing system of claim 35, wherein the list of possible medications received includes medications used in an oncologic medical procedure.

42. The computing system of claim 35, further comprising a retrieving component that retrieves a specific person's medical record from a unified healthcare system, and wherein information in the medical record includes a list selected from one of the groups consisting of medications the person is currently taking or has recently taken, foods the person has consumed the person's allergies to medications and genetic test information for the person.
43. The computing system of claim 35, wherein the outputting component includes a display component that displays the outputted response as a listing of at least one of the matches and the associated atypical clinical event, and wherein the atypical clinical event is one selected from the group consisting of a drug-drug interaction, drug-food interaction, drug-allergy interaction and a drug-gene interaction.
44. The computing system of claim 44, wherein the list of possible medications received includes a dosage amount for each medication in the list, and wherein the outputted response further includes an indication of the predicted severity of the atypical clinical event.
45. The computing system of claim 44, further comprising a selecting component for selecting a medication of the list of possible medications that is involved in the match, and wherein the display component displays information about the selected medication.
46. The computing system of claim 35, wherein the receiving component receives the list of possible medications to be administered over a communication network from a remote computing device.

47. The computing system of claim 35, wherein the determining component includes a querying component that queries a data structure containing information selected from one of the groups consisting of drug-drug interactions and drug-food interactions, and wherein the determining component determines if each at least one match correlates with one of the drug-drug interactions and drug-food interactions.
48. A computing system for preemptively determining the potential for atypical clinical event occurrence related to the administering of a medication to a person having an electronic medical record, comprising:
- an accessing component that accesses a pre-defined list of possible medications that may be administered prior to or during a medical procedure;
  - a comparing component for comparing the medication list to information in a person's medical record;
  - a determining component that determines whether a match exists between any of the medications included in the list and the medical record information, the match relating to the potential of an atypical clinical event occurring if the associated medication were to be administered to the person; and
  - an outputting component that outputs a response relating to each match.
49. The computing system of claim 48, wherein the atypical clinical event is one selected from the group consisting of a drug-drug interaction, drug-food interaction, drug-allergy interaction and a drug-gene interaction.
50. The computing system of claim 48, wherein the list of possible medications received includes medications used in a medical procedure involving anesthesia.

51. The computing system of claim 48, further comprising a retrieving component that retrieves a specific person's medical record from a unified healthcare system, and wherein information in the medical record includes a list selected from one of the groups consisting of medications the person is currently taking or has recently taken, foods the person has consumed the person's allergies to medications and genetic test information for the person.
52. The computing system of claim 48, wherein the outputting component includes a display component that displays the outputted response as a listing of at least one of the matches and the associated atypical clinical event, and wherein the atypical clinical event is one selected from the group consisting of a drug-drug interaction, drug-food interaction, drug-allergy interaction and a drug-gene interaction.
53. The computing system of claim 52, wherein the list of possible medications received includes a dosage amount for each medication in the list, and wherein the outputted response further includes an indication of the predicted severity of the atypical clinical event.
54. The computing system of claim 52, further comprising a selecting component for selecting a medication of the list of possible medications that is involved in the match, and wherein the display component displays information about the selected medication.
55. The computing system of claim 48, wherein the receiving component receives the list of possible medications to be administered over a communication network from a remote computing device.

56. The computing system of claim 48, wherein the determining component includes a querying component that queries a data structure containing information selected from one of the groups consisting of drug-drug interactions and drug-food interactions, and wherein the determining component determines if each at least one match correlates with one of the drug-drug interactions and drug-food interactions.
57. A computer-readable medium containing instructions for controlling a computing system for preemptive determination of the potential for atypical clinical event occurrence related to the administering of at least one medication to a person having an electronic medical record, comprising the steps of:
- receiving a list of possible medications that may be administered prior to or during a medical procedure;
  - comparing the medication list to information in a person's medical record; and
  - determining whether at least one match exists between any of the medications included in the list and the record information, the match relating to the potential of an atypical clinical event occurring if the associated medication were to be administered to the person, and if there is a match, outputting a response relating to each match.
58. The computer-readable medium of claim 57, wherein receiving a list of possible medications comprises receiving a list of possible medications that may be administered to a specific person scheduled to undergo a specific type of medical procedure, and wherein comparing the medication list comprises comparing the medication list to information in the specific person's medical record.

59. The computer-readable medium of claim 57, wherein receiving a list of possible medications comprises receiving a list of possible medications that may be administered to any person scheduled to undergo a specific type of medical procedure, and further comprising selecting a person to undergo the medical procedure and receive at least one of the medications from the list of medications.
60. The computer-readable medium of claim 57, wherein the atypical clinical event is one selected from the group consisting of a drug-drug interaction, drug-food interaction, a drug-allergy interaction, and a drug-gene interaction.
61. The computer-readable medium of claim 57, wherein the medical procedure includes any medical procedure requiring the use of anesthesia.
62. The computer-readable medium of claim 57, wherein the list of possible medications includes medications used in a medical procedure involving anesthesia.
63. The computer-readable medium of claim 57, wherein the list of possible medications includes medications used in a radiologic medical procedure.
64. The computer-readable medium of claim 57, wherein the list of possible medications includes medications used in an oncologic medical procedure.
65. The computer-readable medium of claim 57, wherein the information in the person's medical record includes a list selected from one of the groups consisting of medications the person is currently taking or has recently taken, foods the person has consumed, the person's allergies to medications and genetic test information for the person.

66. The computer-readable medium of claim 57, wherein the response includes a listing of the match and the associated atypical clinical event, and wherein the atypical clinical event is one selected from the group consisting of a drug-drug interaction, drug-food interaction, drug-allergy interaction and drug-gene interaction.
67. The computer-readable medium of claim 66, wherein the list of possible medications includes a dosage amount for each medication in the list, and wherein the response further includes an indication of the predicted severity of the atypical clinical event.
68. The computer-readable medium of claim 66, further comprising displaying information about at least one medication of the list of possible medications that is involved in the match upon selection of the medication at the response.
69. The computer-readable medium of claim 57, wherein the list of possible medications is received over a communication network from a remote computing device.
70. The computer-readable medium of claim 57, further comprising:
- selecting the person from a list of person's scheduled for a medical procedure;
  - and
  - retrieving the person's medical record prior to comparing the medication list to information in the person's medical record.

71. The computer-readable medium of claim 57, wherein the step of determining whether at least one match exists includes querying a data structure containing information selected from one of the groups consisting of drug-drug interactions and drug-food interactions, and determining if each at least one match correlates with one of the drug-drug interactions and drug-food interactions.
72. The computer-readable medium of claim 57, further comprising retrieving a specific person's medical record prior to comparing the medication list to information in the person's medical record.
73. A computer-readable medium containing instructions for controlling a computing system for preemptive determination of the potential for atypical clinical event occurrence related to the administering of at least one medication to a person having an electronic medical record, comprising the steps of:
- accessing a pre-defined list of possible medications that may be administered prior to or during a medical procedure;
  - comparing the medication list to information in a person's medical record; and
  - determining whether at least one match exists between any of the medications included in the list and the record information, the match relating to the potential of an atypical clinical event occurring if the associated medication were to be administered to the person, and if there is a match, outputting a response relating to each match.